

**REMARKS****I. Prosecution History.**

Claims 1-78 were originally submitted for examination with filing of the present nonprovisional patent application, which claims priority to provisional patent application 60/214,339 filed June 27, 2000. Four groups of claims were identified in a four-way restriction, of which Applicant selected Group I, Claims 1-31, for examination. Claims 32-78 remain withdrawn from examination.

In the first Office Action, the elected claims, 1-31, were rejected by the Examiner under 35 U.S.C. §102(e) and §103(a). More particularly, Claims 1 - 11 and 14 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,625,580 (hereinafter referred to as "Tayama"), while Claims 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over Tayama in view of U.S. Patent No. 6,076,167 issued to Borza (hereinafter referred to as "Borza"), and 13 and 15-31 were rejected under 35 U.S.C. §103(a) as being unpatentable over Tayama in view of U. S. Patent No. 6,360,101 issued to Irvin (hereinafter referred to as "Irvin"). In response, the applicant amended Claims 1-2, 4-9, 13-19, 22, 25-32; and added new claims 79-104.

In the second Office Action dated 8/12/04, made Final, the Examiner rejected claims 1-4, 30, 31, 79, 80, 82, 83, 85-86, 89-93 and 98-105 under 35 U.S.C. §102(e) as being anticipated by *Eldridge et al.* Claims 5, 87 95 and 96 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge et al* in view of *Kaplan*. Claims 6-9, 13, 15-20,22-24,26,28 and 29 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer et al.* Claims 10 and 21 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Challener et al.* Claim 12 was rejected under 35 U. S. C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer*, and further in view of *Borza*. Claim 14 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Ronen*. Claims 81 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Boyle*. Claims 88 and 94 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Magro et al.* Claims 11 was rejected under

35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer*, and further in view of *Magro*. Claims 25 and 27 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer*, and further in view of *Kaplan*. Finally, claim 97 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Kaplan*, and further in view of *Magro*.

An RCE was filed by Applicant on January 12, 2005 together with a preliminary amendment in response to the Final Office Action. In the preliminary amendment, claims 5, 25-29, 83-87, 95, 96 and 103 were cancelled and claims 1, 7, 8, 15-19, 30, 31, 79 and 100 were amended. Claims 1-4, 7-24, 30, 31, 79-82, 88-94, 97-102, and 104-105 remained pending in the application. Claims 32-78 remained withdrawn.

A First Office Action following the RCE filing is dated April, 22, 2005 is the subject of the present amendment and response. In the official action claims 1-4, 6-9, 13, 15-20, 22-24, 30, 31, 79, 80, 82, 89-93, 98-102, 104 and 105 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer*. Claims 10 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* and further in view of *Challener et al.* Claims 11, 88, 94 and 97 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* further in view of *Magro et al.* Claims 12 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* further in view of *Borza et al.* Claims 14 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* further in view of *Ronen et al.* Claims 81 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* further in view of *Boyle et al.*

Claims 4-6, 13, 24-29, 79-87, 95-96 and 101-104 are cancelled. Applicant has amended claims 1-2, 7-8, 10-12, 14-16, 30, 97 and 100. New claims 106-112 are now being added with this paper. The amendments and new claims are believed to overcome the rejections. Reconsideration is now respectfully solicited.

## **II. Applicant's location based service invention.**

"Location based service" is a term of art that now has significance in the wireless industry, but barely began to be used with any significance after Applicant's provisional patent application filing in June 2000. Those skilled in the art of wireless communications and the Internet now realize the value and potential to make information services highly personalized and mobile. Today it has become clear that one of the best ways to personalize and mobile information services is to enable them to be "location based". A well-known example would be someone using their wireless hand held device (such as a data-enabled cell phone) to search for a restaurant. The location based service application would interact with other location technology components to determine the user's location and provide a list of restaurants within a certain proximity to the mobile user.

Applicant teaches a location based service for wireless devices. This teaching is at the heart of Applicant's patent application. Applicant's teaching of a location based services for wireless handheld devices is clear throughout Applicant's specification, claims and drawings. Applicant's location based services facilitates the location of rendering capabilities (e.g., printers, monitors, etc.) for a user based on the user's mobile device location. The present invention is useful to handheld wireless device users that are mobile (e.g., traveling and/or in-between familiar or assigned enterprise data networks), have immediate requirements for a means to render (e.g., print, display, manipulate) electronic data on a device other than their wireless device, and are not familiar with locations of nearby data rendering devices capable of meeting their rendering requirements.

An important feature of the present invention is that a user can use his/her personal wireless device (WD) to request the support of a network to locate a data rendering means (DRD) located in a fixed public location accessible to the wireless device user. DRDs can include printers, video displays, presentation projectors, Internet kiosks, ATMs, etc., that are publicly available to mobile wireless device users, e.g., installed in public terminals or within retail establishments.

Another important feature of the present invention is that wireless device users can request the network supporting the WD to transfer data to the DRD over networks after using their WD and the network to locate a DRD. The data associated with the wireless device can be obtained from memory or a mailbox associated with the wireless device user and accessible by the network supporting the WD.

Yet another important feature of the present invention is that wireless devices can be used to: control unassigned, user accessible data rendering device; manipulate data after it is transferred to the unassigned user accessible data rendering device before or during data rendering; and check the operational readiness of data rendering devices before or during data rendering.

Public data networks and servers (e.g., telecommunications provider equipment) can be utilized to coordinate data rendering device location based on wireless device location, delivery of data to data rendering devices, and access to data rendering devices. Pass codes and encryption can be used to permit the rendering of data at DRDs.

Applicant's claims as amended fully support the above-described methods and capabilities and are supported by the extensive specification originally submitted by Applicant.

### **III. Summary of References Cited against Independent claims 1, 15, 30 and 100.**

Applicant believes it would be helpful to summarize and characterize the primary references, *Eldridge* et al (US 6,515,988) and *Cromer* et al (US 6,493,104), cited against Independent claims 1, 15, 30 and 100. If claims 1, 15, 30 and 100 overcome *Eldridge* and *Cromer*, claims dependent on claims 1, 15, 30 and 100 should also overcome the primary references and be allowable. Therefore, the following summarizes the salient features of *Eldridge* and *Cromer* and how they are different from Applicant's invention as claimed under independent claims 1, 15, 30 and 100 as amended.

**Eldridge et al.****Eldridge et al does not teach or suggest a location based service.**

*Eldridge* only teaches the redirection of data and requires a scanner, copier or printer (rendering device) to accept a token that includes data identifying a document's location in/at a remote source (e.g., server memory, network URL/address). The token is provided directly to the rendering device from the wireless device prior to the rendering device's retrieval of the document from a source remote to the wireless device and rendering device. Given this requirement, it is clear that the wireless device user must actually know the identity and the location of the rendering device. The physical location of the user device before locating a rendering device is not important in the *Eldridge* teaching.

The transfer of a token to a rendering device cannot occur unless the rendering device's identity and location is first known by the wireless device user. Once a token identifying where the data is located is received by the rendering device from the wireless device, the rendering device can retrieve the data over a data network from its stored location where it can thereafter be rendered by the rendering device.

*Eldridge* does not teach direct rendering of data from wireless devices. The main purpose of *Eldridge* is to simplify document retrieval, network transfer and rendering by providing tokens identifying locations from which a rendering device can obtain data other than directly from a wireless device.

**Cromer et al.**

**Cromer et al does not teach or describe a location based service.** *Cromer* merely teaches a data processing system with method permitting a computer to automatically detect the presence of a nearby printer and to establish a communications link with the printer. As written in its Abstract, *Cromer* requires a wireless device to establish close range communications with the printer, which means it must likely be located within wireless RF reception

range of the printer. Furthermore, Cromer does not determine the location of the printer based on the location of the wireless device.

Cromer clearly requires a portable computer to transmit a short range wireless query signal for receipt directly by a printer located in the same general area as the portable computer. The signal being transmitted is a short range radio frequency signal. The printer, in response to the query signal, transmits a reply RF signal. The computer automatically establishes an RF communication link with the printer so that the computer can utilize the printer to print information. Wireless communications network resources intervention to locate the printer for a hand held device/user is not taught by Cromer.

Cromer is useless to a device user located more than a mile (or even 1/8 mile) from a printer. A user driving down the interstate likely cannot communicate with a wireless printer. Wireless communications resource intervention would be required.

**IV. Claims 1-4, 6-9, 13, 15-20, 22-24, 30, 31, 79, 80, 82, 89-93, 98-102, 104 and 105 rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer*; Claims 6-9, 13, 15-20, 22-24, 26, 28 and 29 stand rejected as being unpatentable over *Eldridge et al* in view of *Cromer et al*; Claims 10 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* and further in view of *Challener et al*; Claims 11, 88, 94 and 97 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* further in view of *Magro et al*; Claim 12 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* further in view of *Borza et al*. Claims 14 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* further in view of *Ronen et al*. Claims 81 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* further in view of *Boyle et al*.**

Claims 1-4, 6-9, 13, 15-20, 22-24, 30, 31, 79, 80, 82, 89-93, 98-102, 104 and 105 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer*. Claims 10 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* and further in view of *Challener et al*. Claims 11, 88, 94 and 97 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer*

further in view of *Magro* et al. Claim 12 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* further in view of *Borza* et al. Claims 14 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* further in view of *Ronen* et al. Claims 81 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Eldridge* in view of *Cromer* further in view of *Boyle* et al.

The focus of Applicant's remarks will be on independent claims 1, 15, 30 and 100. Should claims 1, 15 30 and 100 overcome *Eldridge* and *Cromer*, claims dependent on claims 1, 15 30 and 100 will also overcome the primary references based on their dependency, and will therefore be allowable.

#### **Requirements or Prima Facie Obviousness.**

M.P.E.P. §2143 sets out the three basic criteria that a patent examiner must satisfy to establish a prima facie case of obviousness:

1. some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
2. a reasonable expectation of success; and
3. the teaching or suggestion of all the claim limitations by the prior art reference (or references when combined).

It follows that in the absence of such a prima facie showing of obviousness by the examiner (assuming there are no objections or other grounds for rejection), an applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443 (Fed. Cir. 1992).

Thus, in order to support an obviousness rejection, the Examiner is obliged to produce evidence compelling a conclusion that each of the three aforementioned basic criteria has been met.

**Application of the obviousness Requirements to the Rejection of Claims 1, 15, 30 and 100.**

Applicant's independent claims as amended provide that data is transferred to a publicly available DRD through a network at the request of the WD. The transfer of data to a publicly available DRD only occurs after a DRD is identified by the WD to the network which is first based on the WD's location.

Applicant's claims, as previously amended and relevant to this rejection, read as follows:

1. A method of brokering data between handheld wireless devices and data rendering devices, comprising:  
    selecting data from a wireless device (WD) for rendering at a publicly available data rendering device (DRD) with a location not yet known by the WD;  
    receiving a request from the WD at the network supporting the WD to locate at least one DRD in accordance with a combination of the WD's geographic location and a WD user profile associated with said WD;  
    locating at least one DRD located near said WD and matching the WD user profile;  
    identifying to the WD at least one DRD located near the WD and matching said WD user profile to the WD in response to said request and  
    selecting a DRD; and  
transferring the data to said DRD for rendering from memory associated with the WD.

15. A method of brokering data between a wireless device and a data rendering device (DRD) not assigned to a wireless device (WD) and accessible to WD users, wherein a WD user performs the following steps at the WD:

    selecting data to render at a DRD;



entering a DRD locator request with a network supporting the WD to find at least one DRD located near the WD, said locator request including WD location information;

receiving DRD location information at said WD for the at least one DRD located near the WD, wherein said DRD location information is based on said WD location information;

selecting a DRD for rendering the data; and

requesting at the WD that the data be transferred to said DRD through the network supporting the WD.

30. A method of brokering data between wireless devices and data rendering devices, comprising enabling a user of a wireless device (WD) to perform the following steps:

a user of a WD requesting support from a network supporting the WD to assist the user in locating at least one data rendering device (DRD) not assigned to the WD and physically accessible to the user of the WD, said locating executed by the network in accordance with a WD user profile located in at least one of the WD and/or the network and the geographic location of the WD;

receiving DRD location information at the WD for the at least one DRD located near the WD, wherein said DRD location information is based on the geographic location of the WD and the WD user profile;

selecting a DRD for rendering data;

selecting data for rendering at the DRD; and

providing the data via the network supporting the WD to the DRD for rendering.

100. A method of supporting wireless hand held device users in brokering data between handheld wireless devices and data rendering devices, steps by a hand held wireless device user comprising:

providing a request to a network resource to locate a publicly available data rendering device (DRD) for rendering the data, said request provided through a hand held wireless device (WD) and a public wireless communications network supporting wireless communication by the WD to

a network resource adapted for providing assistance to hand held wireless devices in locating DRDs by determining the WD's geographic location, locating at least one DRD located near the WD based on its geographic location and identifying at least one DRD to the WD;

receiving location information from the network resource through said WD identifying at least one DRD located near the WD's location as determined by the network resource;

selecting one DRD;

selecting data for rendering at said DRD using the WD; and

transferring the data to said DRD for rendering.

*Eldridge et al* and *Cromer et al*, alone or in combination, do not first determine the WD's location and then have a wireless communications network use the WD's location information to help locate and identify a DRD located near the WD.

*Eldridge et al* and *Cromer et al*, alone or in combination, do not use a network to locate a rendering device on behalf of a wireless device prior the wireless device establishing communications with the rendering device to render data.

*Eldridge et al* and *Cromer et al*, alone or in combination, do not use a network to: locate a rendering device on behalf of a wireless device, identify the location of the rendering device to the WD, retrieve data and render the data at the rendering device, at the request of the WD.

By contrast to the cited art, Applicant's claims require is a determination of the WD's location first before a DRD can be located.

*Eldridge* only identifies the identity of data and its location for retrieval and rendering a DRD using a token, which provides instructions and authorization to a DRD to retrieve the document from a remote resource. The DRD must then obtain the data for rendering based only upon information provided in the token regarding the data's location. *Eldridge et al* and Applicant's approaches to rendering data at the request of a wireless device are completely different. *Cromer* must be physically near the DRD to support close

range RF communications with the DRD, which means that the DRD is already found. *Cromer* does not utilize a network to locate or communicate a DRD. Furthermore, locating a DRD by *Cromer* does not first depend on a determination of *Cromer's* device. Neither *Eldridge* nor *Cromer* teach a location based service.

Applicant respectfully submits that rejection against Independent claims 1, 15, 30 and 100 as amended, and ultimately their respective dependent claims, clearly fails under the third prong of the obviousness test. The primary references cited against Applicant's claims, *Eldridge* and *Cromer*, neither teach nor suggest, alone nor in combination, all of the limitations set out in independent Claims 1, 15, 30 and 100.

*Eldridge* and *Cromer* would never be combined as suggested by Examiner because each reference provides a completely different approach to data management. *Eldridge* would not benefit from a sustained wireless connection with a printer because *Eldridge* simply provides data location information to the printer so that it can retrieve the data for printing based on token information about the data. In fact *Eldridge* teaches away from the process claimed by applicant because *Eldridge* does not want to request a document transfer from a network to the DRD but instead requires the DRD to obtain a document given information provided in a token.

Because combining any of the cited references does not address all of the elements to provide the functionality and benefits to wireless device users as described and specifically claimed by Applicant in independent claims 15 and 30, the rejections have been traversed. Reconsideration of the rejected claims is respectfully requested.

**V. New claims.**

Applicant has added a new independent claim 106 and dependent claims that are printer specific. No new matter is being added by the addition of these claims, nor is a new search necessitated by their addition. Fees for the new claims have already been paid for in Applicant's filing of the original application, from which the present application is an RCE.

These claims are not added with the intent of limiting the scope of Applicant's other claims, but are provided with a view towards a specific printer-related use in the marketplace.

Independent claim 106 captures an important aspect of the invention that enables a wireless device to locate a printer based first on the location of the wireless device. As discussed above, neither *Eldridge* or *Comer* teach or suggest a location based service method that will enable data rendering device location support through the intervention of a network, location that is first based on the wireless devices location. As described in the summary provided in Section II above, this method is important and useful as a location based service for wireless hand held device users on the go, such as traveling salesmen, that need a time efficient way to find and qualify a printer. A printer that meets the wireless device user location needs and/or user profile is identified to the user based on his/her location for use by the user; a concept not taught by the cited art.

New claims 106-117 read as follows:

106. (New) A location based service method using wireless communications network resources to assist a user of a hand held wireless device supported by the wireless communications network to locate a publicly accessible printer, the method comprising the steps of:  
receiving a request from a hand held wireless device at a wireless communications network resource for assistance in locating a publicly accessible printer;

said network resource determining the hand held wireless device's geographic location;

said network resource using the hand held wireless device's geographic location to locate at least one publicly accessible printer located near the hand held wireless device; and

said network resource identifying the at least one publicly accessible printer including its physical location to the hand held wireless device.

107. (New) The method of claim 106 further comprising the steps of:

receiving a request at a network server from the hand held wireless device to retrieve data stored in memory associated with the wireless hand held device and to transfer the data to the at least one publicly accessible printer identified by the network resource; and

said network server transferring the data to said at least one publicly accessible printer in response to the request.

108. (New) The method of claim 107 further comprising the step of said at least one publicly accessible printer receiving the data from said network server.

109. (New) The method of claim 108 further comprising the step of said at least one publicly accessible printer rendering the data it received from the network server after further receiving a passcode entered by the user of the wireless hand held device directly onto a user interface associated with the at least one publicly available printer.

110. (New) The method of claim 108 further comprising the step of said at least one publicly accessible printer rendering the data it received from the network server after further receiving an infrared authorization signal from the wireless hand held device.

111. (New) The method of claim 108 further comprising the step of said at least one publicly accessible printer rendering the data it received from the network server after further receiving a wireless authorization signal provided locally from the wireless hand held device.

112. (New) The method of claim 106 further comprising the steps of:

the user of a hand held wireless device physically locating the publicly available printer;

the user of a hand held wireless device transmitting a request to a network server from the hand held wireless device to retrieve data stored in memory associated with the wireless hand held device and to transfer the data to the at least one publicly accessible printer identified by the network resource; and

said network server transferring the data to said at least one publicly accessible printer in response to the request.

113. (New) The method of claim 112 further comprising the step of said at least one publicly accessible printer receiving the data from said network server.

114. (New) The method of claim 113 further comprising the step of said at least one publicly accessible printer rendering the data it received from the network server after further receiving a passcode entered by the user of the wireless hand held device directly onto a user interface associated with the at least one publicly available printer.

115. (New) The method of claim 113 further comprising the step of said at least one publicly accessible printer rendering the data it received from the network server after further receiving an infrared authorization signal from the wireless hand held device.

116. (New) The method of claim 113 further comprising the step of said at least one publicly accessible printer rendering the data it received from the network server after further receiving a wireless authorization signal provided locally from the wireless hand held device.

117. (New) The method of claim 106 further comprising the steps of:

the user of a hand held wireless device physically locating the publicly available printer;

the user of a hand held wireless device wirelessly transmitting data from the hand held wireless device to said at least one publicly accessible printer;

said at least one publicly accessible printer receiving the data from the hand held wireless device; and

said at least one publicly accessible printer rendering the data.

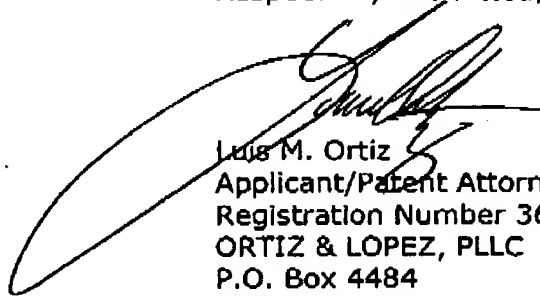
## VI. Conclusion

In view of the foregoing remarks, the Applicant submits that Claims 1-4, 7-24, 30, 31, 79-82, 88-94, 97-102, and 104-105, and new claims 106-117, which now remain pending in the application, are distinct over the cited references and are now in allowable form as amended. Accordingly, Applicant earnestly solicits the favorable reconsideration of his application, and respectfully request that the pending claims be passed into early Issue.

Should the Examiner discern any remaining impediment to the prompt allowance of the aforementioned claims that might be resolved or overcome with the aid a telephone conference, he is cordially invited to call the undersigned at the telephone number provided below.

Respectfully submitted,

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